

### **Amendments to the Claims:**

This listing of claims will replace all prior versions and listing of claims in the application:

#### **Listing of Claims:**

1-19. (Cancelled)

20. (Currently Amended) A method for designing a circuit board, the method comprising:

transmitting a user interface that requests entry of circuit board design data,  
receiving user-supplied circuit board design data via the user interface,  
retrieving circuit board manufacturing capability data from a manufacturing  
capability database in response to the user-supplied circuit board design data,  
determining whether the user-supplied circuit board design data exceeds ~~the~~  
manufacturing capability of a circuit board manufacturer based on a comparison of the  
user-supplied circuit board design data and the circuit board manufacturing capability data, and  
updating the user interface if the user-supplied circuit board design data exceeds  
the manufacturing capability of the circuit board manufacturer.

21. (Currently Amended) The method of claim 20, wherein the transmitting of  
the user interface comprises transmitting the user interface to a client machine via a  
publicly-accessible global network in response to a user-supplied request received via the  
publicly-accessible global network.

22. (Currently Amended) The method of claim 20, wherein the transmitting of  
the user interface comprises transmitting the user interface application from a server machine to a  
client machine via the Internet.

23. (Currently Amended) The method claim 20, wherein the transmitting of the  
user interface comprises transmitting the manufacturing capability database with the user interface  
application from a server machine to a client machine via a publicly-accessible global network.

24. (Currently Amended) The method of claim 20, wherein the receiving of the user-supplied circuit board design data comprises receiving the user-supplied circuit board design data via an input device of a client machine.

25. (Currently Amended) The method of claim 20, wherein the receiving of the user-supplied circuit board design data comprises receiving the user-supplied circuit board design data via a publicly-accessible global network.

26. (Currently Amended) The method of claim 20, wherein the retrieving of the circuit board manufacturing capability data comprises retrieving the circuit board manufacturing capability data from the manufacturing capability database stored on a client machine in response to the user-supplied circuit board design data.

27. (Currently Amended) The method of claim 20, wherein the retrieving of the circuit board manufacturing capability data comprises retrieving the circuit board manufacturing capability data, via a publicly-accessible global network, from the manufacturing capability database stored on a server machine based on the user-supplied circuit board design data.

28. (Currently Amended) The method of claim 27, wherein the retrieving of the circuit board manufacturing capability data comprises retrieving the circuit board manufacturing capability data from a server machine via a publicly-accessible global network.

29. (Currently Amended) The method of claim 20, wherein the updating of the user interface comprises displaying a traffic light image to a user.

30. (Previously Presented) The method of claim 20, further comprising:  
determining a user selected-portion of the user interface,  
retrieving a circuit board design image based on the user selected-portion of the  
user interface, and  
displaying the circuit board design image on the user interface to a user.

31. (Currently amended) A method for designing a circuit board, the method  
comprising:  
transmitting a user interface that requests entry of circuit board design data,  
receiving user-supplied circuit board design data via the user interface,  
retrieving circuit board manufacturing cost data associated with the user-supplied  
circuit board design data from a manufacturing cost database,  
retrieving circuit board manufacturing capability data from a manufacturing  
capability database in response to the user-supplied circuit board design data,  
determining a number of work centers of a circuit board manufacturing process for  
manufacturing the circuit board defined by the user-supplied circuit board design data,  
determining a per-circuit-board setup cost value and a per-circuit-board run cost  
value for each work center,  
determining a per-circuit-board cost using the per-circuit-board setup cost value  
and the per-circuit-board run cost value for each work center,  
determining whether the user-supplied circuit board design data exceeds the  
manufacturing capability of a circuit board manufacturer based on a comparison of the  
user-supplied circuit board design data and the circuit board manufacturing capability data,  
displaying the per-circuit-board cost on the user interface, and  
notifying a user of by updating the user interface if the user-supplied circuit board  
design data exceeds the manufacturing capability of a circuit board manufacturer.

32. (Currently Amended) The method of claim 31, wherein the transmitting of  
the user interface comprises transmitting the user interface to a client machine via a  
publicly-accessible global network in response to a user-supplied request received by a server  
machine via a publicly-accessible global network.

33. (Currently Amended) The method of claim 31, wherein the transmitting of the user interface comprises transmitting the user interface from a server machine to a client machine via the Internet.

34. (Currently Amended) The method claim 31, wherein the transmitting of the user interface comprises transmitting the manufacturing cost database and the manufacturing capability database from a server machine to a client machine via a publicly-accessible global network.

35. (Currently Amended) The method of claim 31, wherein the receiving of the user-supplied circuit board design data comprises receiving the user-supplied circuit board design data via an input device of a client machine.

36. (Currently Amended) The method of claim 31, wherein the receiving of the user-supplied circuit board design data comprises receiving the user-supplied circuit board design data via a publicly-accessible global network.

37. (Currently Amended) The method of claim 31, wherein the retrieving of the circuit board manufacturing cost data comprises retrieving circuit board manufacturing cost data from the manufacturing cost database stored on a client machine in response to the user-supplied circuit board design data.

38. (Currently Amended) The method of claim 31, wherein the retrieving of the circuit board manufacturing cost data comprises retrieving the circuit board manufacturing cost data from the manufacturing cost database stored on a server machine in response to the user-supplied circuit board design data.

39. (Currently Amended) The method of claim 31, wherein the retrieving of the circuit board manufacturing cost data comprises retrieving the circuit board manufacturing cost data from the manufacturing cost database via a publicly-accessible global network.

40. (Currently Amended) The method of claim 31, wherein the retrieving of the circuit board manufacturing capability data comprises retrieving the circuit board manufacturing capability data from the manufacturing capability database stored on a client machine in response to the user-supplied circuit board design data.

41. (Currently Amended) The method of claim 31, wherein the retrieving of the circuit board manufacturing capability data comprises retrieving the circuit board manufacturing capability data from the manufacturing capability database stored on a server machine in response to the user-supplied circuit board design data.

42. (Currently Amended) The method of claim 31, wherein the retrieving of the circuit board manufacturing capability data comprises retrieving the circuit board manufacturing capability data from the manufacturing capability database via a publicly-accessible global network

43. (Currently Amended) The method of claim 31, wherein notifying a user ~~of~~ by updating the user interface comprises displaying a traffic light image to a user.

44-47. (Cancelled)

48. (Previously Presented) The method of claim 31, further comprising determining a tooling cost value based on the user-supplied circuit board design data.

49. (Currently Amended) The method of claim 48, wherein the determining of the a tooling cost value comprises determining the tooling cost value based on the circuit board manufacturing cost data.

50. (Currently Amended) An article comprising a computer-readable signal-bearing medium having therein a plurality of instructions which, when executed by a processor, cause the processor to:

display a user interface that requests entry of circuit board design data to a user,  
retrieve circuit board manufacturing cost data associated with the circuit board  
design data supplied by the user via the user interface from a manufacturing cost database,  
retrieve circuit board manufacturing capability data from a manufacturing  
capability database in response to the circuit board design data,  
determine a per-circuit-board cost using the circuit board manufacturing cost data;  
determine whether the circuit board design data exceeds the manufacturing  
capability of a circuit board manufacturer based on a comparison of the circuit board design data  
and the circuit board manufacturing capability data,  
display the per-circuit-board cost on the user interface, and  
notify the user if the circuit board design data exceeds the manufacturing capability  
of a the circuit board manufacturer.

51. (Currently Amended) The article of claim 50, wherein the to retrieve the  
circuit board manufacturing cost data comprises to retrieve the circuit board manufacturing cost  
data from the manufacturing cost database via a publicly-accessible global network.

52. (Currently Amended) The article of claim 50, wherein the to retrieve the  
circuit board manufacturing capability data comprises to retrieve ~~the~~ circuit board manufacturing  
capability data from the manufacturing capability database via ~~the~~ a publicly-accessible global  
network.